

**A** Weyerhaeuser

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Tel (253) 924 3746 Fax (253) 924 6182

E-mail: Jennifer.hale@weyerhaeuser.com

April 30, 2008

Mr. Sam Chummar Remedial Project Manager Superfund Division U.S. EPA Region 5 (SR-6J) 77 West Jackson Boulevard Chicago, IL 60604-3590

Subject: Plainwell Mill Property, Plainwell, Michigan March- April 2008 Progress Report

Dear Sam:

As required by Task 8, *Progress Reports*, in the Statement of Work for the RI/FS at the Plainwell Inc., Mill Property, I am submitting the attached progress report for the period from March 21, through April 18, 2008, for the above-referenced site.

Please call me, at (253) 924-3746, if you have any questions.

Sincerely,

Weyerhaeuser Company

Jennner Hale

Environmental Manager

## Attachments

cc: Paul Bucholtz, MDEQ (3 copies)
Erik Wilson, City of Plainwell
John Gross, Weyerhaeuser Company
Joe Jackowski, Weyerhaeuser Company
Mark Schneider, Perkins Coie
Kathy Huibregtse, RMT, Inc.
James Hutchens, RMT, Inc.

# Progress Report No. 19 March 21, 2008, through April 18, 2008

# Remedial Investigation and Feasibility Study Plainwell, Inc., Mill Property, Plainwell, Michigan

This progress report is being submitted in accordance with Task 8, *Progress Reports*, and the *Schedule for Major Deliverables* contained in the Statement of Work for the RI/FS at the Plainwell, Inc., Mill Property.

# 1. Operable Unit 7 – Plainwell Mill Site

Summary of Activities Undertaken in Support of the Community Relations Plan (completed during the current reporting period and anticipated during the next period):

No activities were performed during this reporting period

Summary of Any Modifications to the Work Plans or Other Schedules Proposed To, or Approved By, the USEPA:

- Weyerhaeuser is awaiting comments from the USEPA and MDEQ on the RI/FS work plan.
- An addendum to the RI/FS work plan was approved by the USEPA on April 8, 2008. The addendum identifies activities to gather additional information about the potential source of oily soils and elevated polychlorinated biphenyls (PCBs) detected along the banks near the Mill buildings. The initial phase of the addendum includes historical review of documents which is ongoing and performing a geophysical survey of the area behind the mill as soon as weather and schedule allow this task.

# 2. Operable Unit 5 – Plainwell Mill Banks - Kalamazoo River

Activities performed as part of the Emergency Action during the current reporting period included:

- The remaining residual material along the mill banks was excavated with excavation activities completed on March 31, 2008. Approximately 4,000 cubic yards of material was removed and placed within the dewatering pad.
- Material from two areas suspected of containing elevated concentrations of PCBs was segregated into dumpsters and analyzed for total PCBs. Results are discussed below. Disposal options are being evaluated. .
- The top 6"-12" of surface material from the temporary access roads used to access the banks during the removal efforts was removed and placed within the containment pad.
- The top of banks as well as the fill areas along Zone A and Zone B were hydroseeded to assist in vegetative growth.
- The water within the containment pad was treated using the on-site water treatment system, sampled and discharged.
- The material within the containment pad was solidified using Mintek Calciment bed ash (MSDS for the Calciment is attached). Characterization samples of the treated residuals were

- also collected and are discussed below. A decontamination pad was constructed to clean trucks prior to leaving site.
- Work began on preparation of a material disposal plan. A discussion of material transportation and disposal planning was initiated by the USEPA Remedial Project Manager.

# Summary of Data Collected During the Current Reporting Period:

- To treat water that had collected in the containment pad, the water treatment unit was operated beginning on March 19, 2008. Effluent samples were obtained from the water treatment system during operation. During this operation, the effluent was returned to the holding tank and re-circulated until the effluent analytical results were received. The effluent analysis resulted in J qualified PCB data, which were defined as detectable levels of PCBs below the calibrated range of the instrument with an estimated value below the laboratory standard, but above the method detection limit (MDL). Instead of discharging the water, the treated water remained in the storage tank while the treatment system was upgraded with a supplemental bag filter to remove additional solids from the water. The system was restarted on March 28 and the effluent re-sampled. The reported PCB concentration for this effluent sample was lower, but still had a flagged detection of PCBs. All fabric filters were then replaced and the water was re-circulated through the system over the weekend. The third resampled effluent result was reported as containing non detectable PCBS with no data qualifiers. The water was discharged on March 31. All of the filters were then changed again prior to the next operation. Based on the prior sampling, each additional holding tank of water re-circulated for a minimum of two days prior to discharge. No detectable levels of PCBs were identified in either of these effluent samples. The discharges took place on April 3 and April 7. . A total of approximately 64,000 gallons of water was treated and discharged during the three events. Sample results are attached.
- Composite samples collected from each of the two segregated dumpsters were analyzed for total PCBs. RB-East (3.21 mg/kg) is the material segregated from the central portion of Zone C. RB-West (0.62 mg/kg) is the material segregated from the east end of Zone D. Results of the samples are attached. Disposal options for this material are being discussed with the USEPA RPM.
- The material stored on the containment pad was separated into four quadrants. Each of the quadrants was sampled for total PCBs prior to the addition of the stabilizing agent (PAD 1A, 1B, 2A, 2B). The results indicated total PCB concentrations of 3.24 mg/kg, 3.2 mg/kg, 3.38 mg/kg, and 2.56 mg/kg. In addition, two composite samples were submitted for landfill characterization testing. (PAD1, PAD2). Results are anticipated during the next reporting period.
- Air monitoring according to the Site Health and Safety Plan (HASP) was conducted during offloading and mixing of the Calciment material. Preliminary air monitoring results from the personal data RAM placed approximately 50 yards down wind of the mixing and offloading activities indicate that the maximum short term exposure limit (15 minute average) observed was ~1 mg/m³. This value is significantly lower than the OSHA 8-Hour Time Weighted Average threshold value of 15 mg/m³ identified as the threshold of concern in the Site HASP.

Summary of Problems Encountered During the Current Reporting Period:

No problems were encountered.

Summary and Schedule of Work Anticipated During the Next Reporting Period:

- Disposal of the material within the containment pad.
- Disposal of the segregated material within the two dumpsters.
- Demobilization of equipment and personnel from the site.
- Initiate work associated with the work plan addendum described above.
- Begin preparation of the documentation report for the emergency action.

Anticipated Problems Associated with Work During the Next Period:

None.

Planned Resolution of Past or Anticipated Problems:

■ None are needed.

Other Relevant Information:

None.



# MATERIAL SAFETY DATA SHEET

## SECTION 1. PRODUCT IDENTIFICATION

Date: 01/01/08 Code: Oregon, OH

Product Name Calciment® - Distributor

Telephone

Calciment® Bed Ash Mintek Resources, Inc. PO Box 340187 937-431-0218 Office 937-431-1305 Fax

Beavercreek, OH 45434

800-424-9300 CHEMTREC

## SECTION 2. TYPICAL COMPOSITION

Component	Formul <b>a</b>	% WE.	CAS No.	PEL
Calcium Oxide	CaO	50 - 55	1305-78-8	5mg/m³
Amorphous Silica	SiO	2 - 3	7631-86-9	80mg/m <sup>3</sup>
Aluminum Oxide	$Al_2O_3$	0.1 - 0.2	1344-28-1	15mg/m <sup>3</sup>
Ferric Oxide	Fo <sub>2</sub> O <sub>3</sub>	0.5 -1	1309-37-1	10mg/m <sup>3</sup>
Magnesium Oxide	MgO	2-4	1309-48-4	15mg/m <sup>3</sup>
Calcium Sulfate	SO <sub>3</sub>	35 - 38	7778-18-9	15mg/m <sup>3</sup>

# SECTION 3. HAZARD IDENTIFICATION

## Potential Health Effects:

Inhalation (acute): Breathing dust may cause nose, throat or lung irritation and choking. The described effect depends on the degree of exposure and preexisting respiratory conditions.

Inhalation (chronic): Prolonged or repeated exposure may cause inflammation of the respiratory passages. May cause chemical bronchitis with coughing and difficulty breathing. Risk of injury depends on duration and level of exposure. Long term exposures which result in bronchitis may result in additional heath effects.

Eye Contact (acute/chronic): Initially may cause eye irritation with discomfort, tearing or blurring of vision. Continued overexposure could potentially cause burns and damage to comea.

Skin Contact (acute/chronic): Initially may cause dry skin, redness, discomfort or irritation. Containued overexposure could potentially cause burns.

Ingestion (acute/chronic): Causes gastrointestinal tract irritation. May cause nausea vomiting and diarrhea. May cause central nervous system depression.

## SECTION 4. FIRST AID MEASURES

Skin: Wash with soap and water. Seek medical attention if irritation develops or persists.

Eyes: Flush eyes with clean, low-pressure water for at least 15 minutes, oecasionally lifting eyelids. Seek medical attention for abrasions.

Inhalation: Remove personnel from contaminated area to fresh air. If not breathing, give artificial

respiration. If breathing is difficult, give oxygen. Obtain medical attention for discomfort.

Ingestion: If ingested, do not induce vomiting, but drink plenty of water. Seek medical attention for

discomfort.

## SECTION 5. FIRE FIGHTING MEASURES

Flashpoint and Method: None.
Flammable Limits: Not combustible.
Autoignition Temperature: None.

General Hazard: Avoid breathing dust. Although this product is not considered flammable it has the

potential to generate heat when exposed to water.

Firefighting Instructions: Treat adjacent material.

Firefighting Equipment: This product is not a fire hazard. Self contained breathing apparatus is recommended if this material is exposed to heat since there is a possibility that toxic fumes may evolve.

Hazardous Combustion Products: None.

## SECTION 6. ACCIDENT RELEASE MEASURES

General: Ventilate area of leak or spill. Keep unnecessary and unprotected people away from area of spill. Wear appropriate personal protective equipment as specified in section 8. Collect and place in a suitable container for reclamation or disposal, using a method that does not generate dust.

## SECTION 7. HANDLING AND STORAGE

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse.

Avoid contact with eyes, skin and clothing. Do not ingest or inhale.

Storage: Store in a well-ventilated area away from incompatible substances.

Storage Temperature: Unlimited. Storage Pressure: Unlimited.

Empty Containers: Dispose of containers in an approved landfill or incinerator.

## SECTION 8. PHYSICAL AND CHEMICAL PROPERTIES

Color: Varying from light to dark gray/white mix of fine granules and powder

Boiling Point: Not determined
Freezing Point: None, solid
Viscosity: None, solid
Vapor Pressure: Not applicable
Vapor Density: Not applicable

Specific Gravity: Not determined Solubility in Water: Not determined Evaporation Rate: Not measurable

pH (in water):

Not determined

## SECTION 9. STABILITY AND REACTIVITY

General: Product is stable but should be kept dry. It may react exothermically to produce heat when in contact with water.

Incompatible Materials and Conditions to Avoid: May generate hear when exposed to water. Will neutralize mineral acids producing calcium and magnesium based salts. Will absorb carbon dioxide in air. Avoid conditions that generate dusts.

Hazardous Polymerization: Will not occur.

# SECTION 10. TOXILOGICAL INFORMATION

LD50/LC50: No information available.

Carcinogenicity: Not listed by ACGIH, IARC, NOISH, NTP or OSHA

Epidemiology: No information available.
Teratogenicity: No information available

# SECTION 11. ECOLOGICAL INFORMATION

Not available.

# SECTION 12. DISPOSAL CONSIDERATIONS

Dispose in landfill in accordance with all applicable regulations. Any disposal practice must be in compliance with local, provincial, state and federal laws and regulations. Contact local environmental agency for specific rules.

# SECTION 13. TRANSPORTATION INFORMATION

Since the mixture varies by percentages of the different components to the point of being present or absent, it is difficult to evaluate bed ash based on DOT classifications.

# SECTION 14. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA)

Calcium Oxide (CAS# 1305-78-8) is listed on the TSCA inventory

None of the chemicals in this material are listed under TSCA Section 12b

None of the chemicals in this product have a SNUR under TSCA

None of the chemicals are on the Health and Safety reporting list

None of the chemicals in this product are under a Chemical Test Rule

## SARA

Section 302: None of the chemicals in this material have a RQ (reportable quantity)

Section 302: None of the chemicals in this material have a TPQ (threshold planning quantity)

SARA Codes: Acute, Reactive

Section 313: No chemicals are reportable under Section 313:

## Clean Air Act

This material does not contain any hazardous air pollutants. No Class 1 or Class 2 Ozone depletors present.

## Clean Water Act

CWA Hazardous Substances; none CWA Priority Pollutants: None CWA Toxic Pollutants: None

# OSHA Hazard Communication Rule, 29 CFR 1910.1200:

One or more of the constituents identified are considered by OSHA to be hazardous.

## STATE Right-to-Know

Calcium Oxide (CAS# 1305-78-8 is listed on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts
Calcium Sulfate (CAS #7778-18-9) is listed on the following state Right-to-Know lists: Pennsylvania

# CERCLA/SUPERFUND, 40 CFR 117,302:

Not listed.

## WHMIS Information:

This product has a WHMIS classification of E, C

## SECTION 15. MISCELLANEOUS OTHER INFORMATION

## Abbrevations:

CAS No. Chemical Abstract Service number

OSHA Occupational Safety and Health Administration

PEL Permissible Exposure Limit

ACGIH American Conference of Governmental Industrial Hygienists

TLV Threshold Limit Value

TWA Time Weighted Average (8 hour)

CL Ceiling Limit

Mg/m<sup>3</sup> milligrams per cubic meter

IARC International Agency for Research on Caneer

NIOSH National Institute for Occupational Safety and Health

pH negative log of hydrogen ion greater than DOT U.S. Department of Transportation TDG Transportation of Dangerous Goods

CFR Code of Federal Regulations

CERCLA Comprehensive Environmental Response, Compensation and Liability Act

SARA Superfund Amendments and Reauthorization Act

The information contained herein is believed to be accurate and reliable as of the date hereof. However, Mintek Resources, Inc. makes no representation, warranty or guarantee as to results or as to the information's accuracy, reliability or completeness. Mintek has no liability for any loss or damage that may result from use of the information. Each user is responsible to review this information, satisfy itself as to the information's suitability and completeness, and circulate the information to its employees, customers and other appropriate third parties.

**Weyerhaeuser Analytical & Testing Services** 32901 Weyerhaeuser Way South Federal Way, WA 98003

# Report Kalamazoo River RMT Sediment/Waters Method: EPA 608

Client ID Sample Date		WWTP - Effluent DUP 03/19/08 17:04	WWTP Effluent 03/28/08 8:50	WWTP Influent 03/28/08 13:05	WWTP Effluent 03/31/08 10:00	WWTP Influent 03/31/08 15:15
Lab ID		002	003	004	005	006
<u>Analyte</u>	CAS	ug/L	<u>ug/L</u>	ug/L	<u>ug/L</u>	<u>ug/L</u>
Aroclor-1016	12674-11-2	< 0.20	<0.20	< 0.20	<0.20	< 0.20
Aroclor-1221	11104-28-2	<0.20	<0.20	<0.20	<0.20	<0.20
Aroclor-1232	1114-16-5	<0.20	< 0.20	<0.20	< 0.20	<0.20
Aroclor-1242	53469-21-9	<0.20	<0.20	<0.20	< 0.20	<0.20
Aroclor-1248	12672-29-6	0.11 JP	<0.20	< 0.20	< 0.20	0.29
Aroclor-1254	11097-69-1	0.085 JP	0.027 J	0.11 JP	< 0.20	0.16 JP
Aroclor-1260	11096-82-5	<0.20	< 0.20	<0.20	<0.20	<0.20
Surrogate		% Rec	% Rec	% Rec	% Rec	% Rec
Tetrachloroxylene		91%	92%	98%	98%	96%
Decachlorobiphenyl		99%	98%	107%	102%	87%
Date Extracted	-	03/26/08	04/03/08	04/03/08	04/03/08	04/03/08
Date Analyzed		04/03/08	04/03/08	04/03/08	04/03/08	04/03/08

Approved: Randy Eatherton
Telephone: (253)924-6431 Date: 04/04/08

Weyerhaeuser Analytical & Testing Services 32901 Weyerhaeuser Way South Federal Way, WA 98003

# Report Kalamazoo River RMT Sediment/Waters Method: EPA 608

Client ID Sample Date		Method Blank	Method Blank	Lab Control Spike	Lab Control Spike
Lab ID					
<u>Analyte</u>	CAS	ug/L	ug/L	% Rec	% Rec
Aroclor-1016	12674-11-2	<0.20	< 0.20	84%	81%
Aroclor-1221	11104-28-2	< 0.20	< 0.20	NA	NA
Aroclor-1232	1114-16-5	< 0.20	<0.20	NA	NA
Aroclor-1242	53469-21-9	< 0.20	< 0.20	NA	NA
Aroclor-1248	12672-29-6	<0.20	< 0.20	NA	NA
Aroclor-1254	11097-69-1	< 0.20	< 0.20	NA	NA
Aroclor-1260	11096-82-5	<0.20	< 0.20	87%	88%
Surrogate		% Rec	% Rec	% Rec	% Rec
Tetrachloroxylene		73%	79%	89%	84%
Decachlorobiphenyl		76%	106%	85%	92%
Date Extracted		03/26/08	04/03/08	03/26/08	04/03/08

04/03/08

04/03/08 04/03/08 04/03/08

Approved: Randy Eatherton Telephone: (253)924-6431

Date Analyzed

Date: 04/04/08

Report

Kalamazoo River RMT Sediment/Waters

Sample Designation	Sample Date	Sample Time	Analytical Lab Code	TP mg/L	TSS mg/L	
WWTP - Effluent	04/03/08	0820	001	0.11	< 4	
WWTP - Effluent	04/07/08	1340	001D 002	0.07	< 4 < 4	

Date Analyzed: 4/7/2008 4/7/2008 Method Used: AM E-365.3 AM S-2540D

> QL: 0.01 4 Analyst: MR/JC MR





April 11, 2008

NATHAN WEBER RMT MILWAUKEE 150 NORTH PATRICK BLVD. SUITE 180 Brookfield, WI 53045

RE: Project: 5130.04 PLAINWELL MILL BANKS

Pace Project No.: 402162

# Dear NATHAN WEBER:

Enclosed are the analytical results for sample(s) received by the laboratory on April 02, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tod Noltemeyer

Tod holtemeyor

tod.noltemeyer@pacelabs.com Project Manager

Enclosures





Pace Analytical Services, Inc. 1241 Bellevue Street Green Bay, WI 54302 (920)469-2436

## **CERTIFICATIONS**

Project:

5130.04 PLAINWELL MILL BANKS

Pace Project No.:

402162

**Green Bay Certification IDs** 

Florida (NELAP) Certification #: E87948 Illinois Certification #: 200050 California Certification #: 06246CA New York Certification #: 11888 North Dakota Certification #: R-150 North Carolina Certification #: 503

Minnesota Certification #: 055-999-334 South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444 Kentucky Certification #: 82 Louisiana Certification #: 04168

Green Bay Volatiles Certification IDs Florida (NELAP) Certification #: E87951 California Certification #: 06247CA Illinois Certification #: 200051 New York Certification #: 11887 North Dakota Certification #: R-200 North Carolina Certification #: 503

Minnesota Certification #: 055-999-334 South Carolina Certification #: 83006001 Wisconsin Certification #: 405132750 Wisconsin DATCP Certification #: 105-444 Kentucky Certification #: 83

Louisiana Certification #: 04169







## **SAMPLE SUMMARY**

Project:

5130.04 PLAINWELL MILL BANKS

Pace Project No.: 402162

Lab ID	Sample ID	Matrix	Date Collected	Date Received
402162001	RB-EAST	Solid	04/01/08 10:24	04/02/08 10:25
402162002	RB-WEST	Solid	04/01/08 10:13	04/02/08 10:25







# **SAMPLE ANALYTE COUNT**

Project:

5130.04 PLAINWELL MILL BANKS

Pace Project No.:

402162

Lab ID	Sample ID	Method	Analysts	Analytes Reported
402162001	RB-EAST	ASTM D2974-87	GWS	1
		EPA 8082	BDS	10
402162002	RB-WEST	ASTM D2974-87	GWS	1
		EPA 8082	BDS	10





Pace Analytical Services, Inc. 1241 Bellevue Street Green Bay, WI 54302

(920)469-2436

## **PROJECT NARRATIVE**

Project:

5130.04 PLAINWELL MILL BANKS

Pace Project No.:

402162

Method: **EPA 8082** Description: 8082 GCS PCB Client:

RMT MADISON

Date:

April 11, 2008

#### General Information:

2 samples were analyzed for EPA 8082. All samples were received in acceptable condition with any exceptions noted below.

#### **Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

#### Sample Preparation:

The samples were prepared in accordance with EPA 3541 with any exceptions noted below.

# Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

## **Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

QC Batch: OEXT/1234

S0: Surrogate recovery outside laboratory control limits.

- RB-EAST (Lab ID: 402162001)
  - · Decachlorobiphenyl (S)

#### Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

## **Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

## Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

## **Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

## **Additional Comments:**





Pace Analytical Services, Inc. 1241 Bellevue Street Green Bay, WI 54302 (920)469-2436

#### **PROJECT NARRATIVE**

Project:

Date:

5130.04 PLAINWELL MILL BANKS

Pace Project No.:

402162

Method: **ASTM D2974-87** Client:

**Description:** Percent Moisture RMT MADISON April 11, 2008

General Information:

2 samples were analyzed for ASTM D2974-87. All samples were received in acceptable condition with any exceptions noted below.

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:** 

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:** 

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:** 

This data package has been reviewed for quality and completeness and is approved for release.





# **ANALYTICAL RESULTS**

Project:

5130.04 PLAINWELL MILL BANKS

Pace Project No.:

402162

Sample: RB-EAST

Date: 04/11/2008 01:04 PM

Lab ID: 402162001

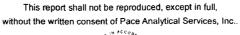
Collected: 04/01/08 10:24 Received: 04/02/08 10:25 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical	Method: EPA	N 8082 Prepar	ation Metho	od: EP	A 3541			
PCB-1016 (Aroclor 1016)	ND u	g/kg	1100	139	10	04/03/08 11:17	04/03/08 23:15	12674-11-2	
PCB-1221 (Aroclor 1221)	ND u	g/kg	1100	139	10	04/03/08 11:17	04/03/08 23:15	11104-28-2	
PCB-1232 (Aroclor 1232)	ND u	g/kg	1100	139	10	04/03/08 11:17	04/03/08 23:15	11141-16-5	
PCB-1242 (Aroclor 1242)	<b>2910</b> u	g/kg	1100	139	10	04/03/08 11:17	04/03/08 23:15	53469-21-9	
PCB-1248 (Aroclor 1248)	ND u	g/kg	1100	139	10	04/03/08 11:17	04/03/08 23:15	12672-29-6	
PCB-1254 (Aroclor 1254)	<b>294J</b> u	g/kg	1100	139	10	04/03/08 11:17	04/03/08 23:15	11097-69-1	
PCB-1260 (Aroclor 1260)	ND u	g/kg	1100	139	10	04/03/08 11:17	04/03/08 23:15	11096-82-5	
PCB, Total	<b>3210</b> u	g/kg	1100	139	10	04/03/08 11:17	04/03/08 23:15	1336-36-3	
Tetrachloro-m-xylene (S)	71 %	,	50-137		10	04/03/08 11:17	04/03/08 23:15	877-09-8	
Decachlorobiphenyl (S)	55 %	ò	56-130		10	04/03/08 11:17	04/03/08 23:15	2051-24-3	S0
Percent Moisture	Analytical	Method: AST	M D2974-87						
Percent Moisture	8.8 %	, 0	0.10	0.10	1		04/03/08 09:26		

**REPORT OF LABORATORY ANALYSIS** 

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# **ANALYTICAL RESULTS**

Project:

5130.04 PLAINWELL MILL BANKS

Pace Project No.:

402162

Sample: RB-WEST

Lab ID: 402162002

Collected: 04/01/08 10:13 Received: 04/02/08 10:25 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	PQL	MDL .	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical	Method: EPA	N 8082 Prepar	ation Metho	od: EP	A 3541			
PCB-1016 (Aroclor 1016)	ND u	ıg/kg	116	14.7	1	04/03/08 11:17	04/03/08 23:43	12674-11-2	
PCB-1221 (Aroclor 1221)	ND u	ıg/kg	116	14.7	1	04/03/08 11:17	04/03/08 23:43	11104-28-2	
PCB-1232 (Aroclor 1232)	ND u	ıg/kg	116	14.7	1	04/03/08 11:17	04/03/08 23:43	11141-16-5	
PCB-1242 (Aroclor 1242)	<b>244</b> u	ıg/kg	116	14.7	1	04/03/08 11:17	04/03/08 23:43	53469-21-9	
PCB-1248 (Aroclor 1248)	ND u	g/kg	116	14.7	1	04/03/08 11:17	04/03/08 23:43	12672-29-6	
PCB-1254 (Aroclor 1254)	<b>325</b> u	ıg/kg	116	14.7	1	04/03/08 11:17	04/03/08 23:43	11097-69-1	
PCB-1260 (Aroclor 1260)	49.8J u	ıg/kg	116	14.7	1	04/03/08 11:17	04/03/08 23:43	11096-82-5	
PCB, Total	619 ย	g/kg	116	14.7	1	04/03/08 11:17	04/03/08 23:43	1336-36-3	
Tetrachloro-m-xylene (S)	84 %	6	50-137		1	04/03/08 11:17	04/03/08 23:43	877-09-8	
Decachlorobiphenyl (S)	64 %	6	56-130		1	04/03/08 11:17	04/03/08 23:43	2051-24-3	
Percent Moisture	Analytical	Method: AST	M D2974-87						
Percent Moisture	13.7 %	6	0.10	0.10	1		04/03/08 09:26		

Date: 04/11/2008 01:04 PM







## **QUALITY CONTROL DATA**

Project:

5130.04 PLAINWELL MILL BANKS

Pace Project No.:

402162

QC Batch:

PMST/1129

Analysis Method:

ASTM D2974-87

QC Batch Method: ASTM D2974-87

Analysis Description:

Dry Weight/Percent Moisture

Associated Lab Samples: 402162001, 402162002

SAMPLE DUPLICATE: 12190

Parameter

402154001 Result

Dup Result

RPD

Max RPD

Qualifiers

Percent Moisture

Units

5.8

6.1

10

Date: 04/11/2008 01:04 PM

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# **QUALITY CONTROL DATA**

Project:

5130.04 PLAINWELL MILL BANKS

Pace Project No.:

402162

QC Batch:

OEXT/1234

Analysis Method:

EPA 8082

QC Batch Method:

EPA 3541

Analysis Description:

8082 GCS PCB

Associated Lab Samples:

402162001, 402162002

METHOD BLANK: 12340

Associated Lab Samples: 402162001, 402162002

		Blank	Reporting	
Parameter	Units	Result	Limit	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	ND	100	
PCB-1221 (Aroclor 1221)	ug/kg	ND	100	
PCB-1232 (Aroclor 1232)	ug/kg	ND	100	
PCB-1242 (Aroclor 1242)	ug/kg	ND	100	
PCB-1248 (Aroclor 1248)	ug/kg	ND	100	
PCB-1254 (Aroclor 1254)	ug/kg	ND	100	
PCB-1260 (Aroclor 1260)	ug/kg	ND	100	
Decachlorobiphenyl (S)	%	71	56-130	
Tetrachloro-m-xylene (S)	%	78	50-137	

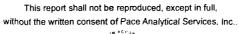
LABORATORY CONTROL SAM	PLE: 12341				-	
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
			ND -			
PCB-1016 (Aroclor 1016) PCB-1221 (Aroclor 1221)	ug/kg ug/kg		ND ND			
PCB-1221 (Aroclor 1221)	ug/kg		ND ND			
PCB-1242 (Aroclor 1242)	ug/kg		ND			
PCB-1248 (Aroclor 1248)	ug/kg		ND			
PCB-1254 (Aroclor 1254)	ug/kg		ND			
PCB-1260 (Aroclor 1260)	ug/kg	500	359	72	61-115	
Decachlorobiphenyl (S)	%			73	56-130	
etrachloro-m-xylene (S)	%			80	50-137	

MATRIX SPIKE & MATRIX SP	PIKE DUPLICAT	ΓE: 12342	-		12343	_						
Parameter	Units	402187006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	<66.8			ND	ND					30	
PCB-1221 (Aroclor 1221)	ug/kg	<66.8			ND	ND					30	
PCB-1232 (Aroclor 1232)	ug/kg	<66.8			ND	ND					30	
PCB-1242 (Aroclor 1242)	ug/kg	<66.8			ND	ND					30	
PCB-1248 (Aroclor 1248)	ug/kg	1740			2370	2330				2	30	
PCB-1254 (Aroclor 1254)	ug/kg	<66.8			ND	ND					30	
PCB-1260 (Aroclor 1260)	ug/kg	751	1320	1320	1890	1930	87	90	65-135	2	30	
Decachlorobiphenyl (S)	%						57	58	56-130			
Tetrachloro-m-xylene (S)	%						71	71	50-137			

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**REPORT OF LABORATORY ANALYSIS** 

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## **QUALIFIERS**

Project:

5130.04 PLAINWELL MILL BANKS

Pace Project No.:

402162

#### **DEFINITIONS**

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

**DUP - Sample Duplicate** 

RPD - Relative Percent Difference

NC - Not Calculable.

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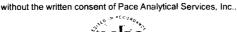
## **ANALYTE QUALIFIERS**

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S0 Surrogate recovery outside laboratory control limits.

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# **QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project:

5130.04 PLAINWELL MILL BANKS

Pace Project No.:

402162

Lab ID Sample ID		QC Batch Method	QC Batch	Analytical Method	Analytical Batch
402162001 402162002	RB-EAST RB-WEST	ASTM D2974-87 ASTM D2974-87	PMST/1129 PMST/1129		
402162001 402162002	RB-EAST RB-WEST	EPA 3541 EPA 3541	OEXT/1234 OEXT/1234	EPA 8082 EPA 8082	GCSV/1131 GCSV/1131

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